Paying Managed Care Plans in a Capitated Medicaid Program: Lessons from the Oregon Health Plan

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October 18, 2001

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The research presented in this repot was performed under Health Care Financing Administration (HCFA) Contract No. 500-94-0056, Paul Boben, Project Officer. The statements contained in this report are solely those of the authors and no endorsement by HCFA should be inferred or implied.

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Introduction

State Medicaid programs are increasingly enrolling Medicaid beneficiaries in managed care plans with the goal of controlling program costs, while improving access to services and quality of care. A crucial policy question for states that implement a Medicaid managed care program is how to set the capitation rates for the managed care plans with which they contract. Many states use an administered pricing system, whereby the state sets capitation rates that any plan wishing to participate in the program must agree to accept. Other states use a competitive bidding system, in which capitation payments are based on plan offers of rates at which they will provide services to their enrolled populations. The state then decides which of the rate offers it is willing to accept. Still others negotiate rates with plans. Regardless of whether a state uses administered pricing, competitive bidding, or negotiated rates, there are several key questions that must be addressed when setting payments or evaluating offerings from plans. These include:

- How should rate categories be defined?
- What data sources should be used to set rates or evaluate rate offerings?
- How should utilization derived from these data sources be adjusted when setting rates or evaluating plan offerings?
- Do rate setting methods need to be modified as a Medicaid managed care program ages and an increasing proportion of the population is enrolled in managed care?
- Should payment rates to plans vary in order to account for enrollment of populations with differing risk characteristics?

This report describes experience with setting capitation rates during the first six years of the Oregon Health Plan (OHP), Oregon's Section 1115 Medicaid waiver program. OHP beneficiaries in nearly every eligibility category are required to enroll in a capitated managed care plan in all areas of the State where contracting plans are available.[1] In areas without a plan or where capacity is inadequate to serve the entire OHP population, beneficiaries are enrolled in primary care case management or, when necessary, remain in traditional fee-for-service. Other important innovations adopted as part of OHP include the use of a prioritized list of medical conditions and treatments to define the benefit package and expanding Medicaid eligibility to include all residents with incomes below 100 percent of the Federal Poverty Level (FPL).

As of April 2000, OHP contracted with fully capitated health plans (FCHPs) to provide physical health services in all but 4 of Oregon's 36 counties. FCHPs cover a full range of acute services.[2] Managed care plans receive a monthly[3] capitation payment for each enrollee[4] that varies by rate category and geographic area. Oregon uses an administered pricing system. The State's actuarial consultant[5] sets the capitation rates and Oregon

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[1] Certain beneficiaries are exempt from managed care enrollment, including Medicare dual eligibles who are enrolled in a Medicare+Choice plan that does not contract with OHP, Native Americans, women who become eligible during the third trimester of their pregnancies, and other individuals for whom managed care enrollment would create access barriers or would disrupt continuity of care.

[2] Separate managed care plans cover dental and mental health services.

[3] Initially, new members were only enrolled in a managed care plan on the first day of the month. In January 1997, OHP began weekly enrollment of beneficiaries. Plans receive pro-rated capitation payments for members that are not enrolled for a full month.

[4] Unlike commercial insurance, Medicaid programs typically make separate capitation payments for each member of a family enrolled in a plan.

[5] PricewaterhouseCoopers, formerly Coopers and Lybrand.

contracts with any plan willing to accept the payment amounts and that meets contracting standards in areas such as access, financial solvency, and quality assurance activities.

The methods used to set rates in OHP have evolved considerably over the life of the program. The number of rate categories has expanded from 9 to 16 in response to program eligibility changes, as well as substantial utilization differences across subgroups within rate categories. Setting capitation rates for eligibility groups with which there was little or no prior experience, such as the expansion populations, has proven particularly challenging. Initially, capitation rates were based on pre-OHP claims data. However, as the program has aged, these data became increasingly out-of-date and Oregon has begun using encounter data instead. Nonetheless, using encounter data may be problematic because of concerns about their completeness and accuracy. The possibility that plans will enroll populations with differing risk characteristics poses serious challenges for setting equitable reimbursement rates under capitated programs. OHP, which began risk adjusting capitation payments for selected rate categories during its fifth year of operation, is one of the first states to implement risk adjustment for a Medicaid population.

Many of the changes in Oregon's rate setting methods over the course of the program address issues that will be faced by other states enrolling a substantial portion of their Medicaid population in managed care. The remainder of this report is organized as follows. We begin with a description of OHP's rate categories and the methods used to establish capitation rates. We then look at trends in capitation payments over time, as well as variation by region of the State. The following section describes methods that have been used to risk adjust payment rates. The report concludes with a discussion of lessons learned from OHP's experiences with rate setting.

Rate Setting Methodology

Rate Categories

Ideally, rate categories should capture groups of beneficiaries that are relatively homogeneous with respect to expected cost. If there is non-random variation within groups, plans may be able to identify lower-cost beneficiaries and selectively enroll them. While defining rate categories more finely can reduce opportunities for risk selection, there are limits to the number of categories that are feasible. First, a greater number of categories increase the complexity of administering a program. Second, cost estimates may not be stable if there are an insufficient number of beneficiaries in a given category. Third, if rate categories are not exogenous (i.e., are based on factors such as diagnosis or use of particular types of service), having more categories increases the possibilities for providers to game the classification system. Thus, there is a trade-off between minimizing potential for selection bias and administrative feasibility.

Over time, OHP has increasingly disaggregated its rate categories. Initially, four categories were established for the Phase 1 population and five for the Phase 2 population.[6] These categories are shown in Exhibit 1. The bulk of the Phase 1 population was covered by the OHP basic category, which included all Phase 1 beneficiaries with incomes below FPL except the General Assistance (GA) population. Along with several categories of traditional Medicaid eligibles, OHP basic included the two expansion population groups. The eligibility groups that comprised the basic rate category were:

[6] Phase 1 of OHP began in February 1994. In January 1995, the aged, blind, disabled, and children in foster care were brought in to OHP under Phase 2.

Exhibit 1

OHP Rate Categories

Effective 2/94 through 9/97	Effective 10/97	Effective 7/98
Phase I	**Phase I**	**Phase I**
OHP Basic	[TANF PLM Pregnant Women < 100% FPL PLM Children born after 10/1/83 < 100% FPL New Families New Adults/Couples]	TANF PLM Pregnant Women < 100% FPL PLM and SCHIP Children 6-18 New Families New Adults/Couples
PLM Pregnant Women 100-133% FPL	PLM Pregnant Women 100-133% FPL	PLM Pregnant Women 100-170% FPL
PLM Children < 6 100-133% FPL	PLM Children < 6 100-133% FPL	[PLM Child < 1 SCHIP Child < 1 PLM and SCHIP Child 1-5]
General Assistance	General Assistance	General Assistance
Phase 2	**Phase 2**	**Phase 2**
Aged with Medicare	[Aged with Medicare Part A & B/Part A only Aged with Medicare Part B only[1]]	Aged with Medicare Part A & B/Part A only Aged with Medicare Part B only[1]
Aged without Medicare	Aged without Medicare	Aged without Medicare
Blind and Disabled with Medicare	Blind and Disabled with Medicare	Blind and Disabled with Medicare
Blind and Disabled without Medicare	Blind and Disabled without Medicare	Blind and Disabled without Medicare
Children in Foster Care	Children in Foster Care	Children in Foster Care

[1] A separate category for aged beneficiaries with Medicare Part B went into effect in March 1997.

- Temporary Assistance to Needy Families (TANF) beneficiaries[7];
- pregnant women (called poverty level medical, or PLM, adults) in families with incomes under 100 percent of FPL;
- PLM children born after September 30, 1983 in families with incomes under 100 percent of FPL;
- expansion-eligible single adults and childless couples with incomes under 100 percent of FPL (New Adults/Couples); and
- expansion-eligible families with incomes under 100 percent of FPL (New Families).

Separate rate categories were established for:

- PLM pregnant women with family incomes up to 133 percent of FPL;
- PLM children under the age of 6 with family incomes up to 133 percent of FPL; and
- General Assistance (GA) beneficiaries, which includes low-income adults who are unable to work due to a medical disability and are not otherwise eligible for Medicaid.

PLM pregnant women and children above poverty were expected to have higher monthly costs than the corresponding PLM beneficiaries below poverty. Although total expected costs per eligibility spell are similar for PLM pregnant women above and below poverty, they do not have the same expected monthly costs because of differences in eligibility rules for these two groups. PLM pregnant women below poverty have longer guaranteed eligibility than those above poverty, so their maternity costs (the main expense for this population) are spread over a longer time period. As a result, PLM pregnant women below poverty should have a lower monthly capitation payment. PLM children below poverty have an older age distribution than those above poverty due to differences in age

[7] The TANF program was previously referred to as Aid to Dependent Children (ADC) in Oregon. For consistency, we refer to this eligibility group as TANF throughout the report.

limits for eligibility. PLM children below poverty are, therefore, expected to be lower cost on average. GA beneficiaries, who qualify for OHP by virtue of their disability, are expected to have higher expenses than other eligibles below poverty.

Phase 2 eligibles were divided into five groups, defined by basis of eligibility and Medicare coverage. These included aged beneficiaries, with and without Medicare; blind and disabled beneficiaries, with and without Medicare; and children in foster care.

In 1997, OHP increased the number of rate categories from 9 to 14. As shown in Exhibit 1, changes applied to the OHP basic and aged with Medicare categories. The most significant change was that separate rate categories were established for the five groups within the OHP basic category. Although the beneficiary groups within this category had different utilization patterns and expected costs, according to OHP administrators, this split was not driven by concerns about selection bias. Rather, the State had found it difficult to accurately estimate the relative size of each group. Because the OHP basic rate was a weighted average of the costs for the five subgroups, calculating the capitation payment was dependent on accurately measuring the size of each group. After separate rate categories were established, the relative size of the subgroups was no longer required for the rate calculation. The Phase 2 rate categories were largely unchanged, although the aged with Medicare category was divided into those with Part B coverage only and those with both Part A and B or Part A only. Beneficiaries with Part B coverage only are significantly more costly because Medicaid is the primary payer for hospital services. Although aged beneficiaries with Part B only are a small share of all OHP eligibles, they comprise about one-fifth of the aged in the Medicare population.

The OHP rate categories were again modified with Oregon's implementation of the State Children's Health Insurance Program (SCHIP) in July 1998. SCHIP expanded eligibility to include all children under age 19 up to 170 percent of FPL. The PLM program still covers children under age 6 with incomes up to 133 percent of FPL, as well as children between the ages of 6 and 18 with incomes up to 100 percent of FPL. SCHIP covers all other children under 170 percent of FPL. As a result of the implementation of SCHIP, the OHP expansion eligibility categories are exclusively adult and no longer include children under age 19.

Capitation rates are calculated separately for children under age 1, children age 1 to 5, and children age 6 to 18. Within the group under age 1, separate categories were established for SCHIP and PLM children in order to account for differences in eligibility rules that affect expected costs.[8] As shown in Exhibit 1, these changes increased the number of rate categories from 14 to 16.

Another eligibility change in March 1998 extended PLM eligibility to pregnant women up to 170 percent of FPL. These new eligibles were included in the existing rate category for PLM pregnant women over poverty.

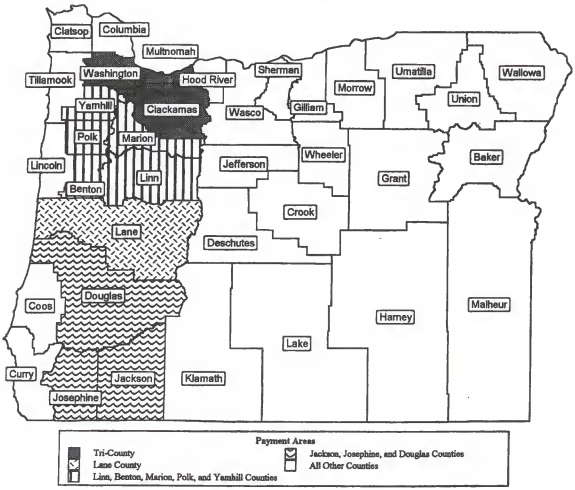
OHP also sets different rates for five geographic areas of the State (Figure 1). The definition of these areas, which is based on groupings of counties, has not changed over the course of the program.[9] The areas vary along an urban/rural dimension and are intended to

[8] Medicaid does not cover the initial hospitalization costs for SCHIP children, who only become eligible after birth; however, these costs are covered for PLM children.

[9] Beginning in October 1998, OHP adopted plan-specific geographic adjusters for inpatient and outpatient hospital services. These adjusters are intended to account for expected utilization of small, rural hospitals based on a plan's service area. Plans are mandated to reimburse these hospitals using cost-based payments.

Figure 1

OHP Geographic Payment Areas



reflect input price differences for medical services across the State.[10] However, they do not account for regional variation in service delivery patterns. The most expensive area is the tri-county metropolitan Portland region. The least expensive category (Other) includes counties in the sparsely-populated area of Oregon east of the Cascade Mountains, as well as several rural counties in northwestern and southwestern Oregon.

Data Used to Set Rates

OHP's actuary estimates the cost of delivering services to the program's beneficiaries in two-year cycles. To date, cost estimates have been developed for the periods February 1994 through September 1995; October 1995 through September 1997; October 1997 through September 1999; and October 1999 through September 2001. In each cycle, separate estimates are prepared for each eligibility group. Finding utilization data on which to base rates poses a substantial challenge as managed care programs mature and enrollment in prepaid plans becomes increasingly prevalent. In addition, there are usually no sources of data on prior utilization by expansion populations. Although some programs, including OHP, require managed care plans to report encounter data on services delivered, the quality of these data is often problematic. As a result, during the first three rate-setting cycles, OHP rates were based on fee-for-service claims data. Two main sources of fee-for-service data were used: Oregon Medicaid fee-for-service claims data and Blue Cross/Blue Shield of Oregon (BCBSO) claims data for a commercially insured population. During the fourth rate-setting cycle, however, OHP began using encounter data to set capitation rates for FCHPs.

[10] Input price adjustments for hospital services are based on geographic factors used by HCFA to set DRG payment rates, while those for professional services are based on geographic factors used to set RBRVS payments. No geographic adjustment is applied to prescription drugs or supplies.

The adoption of encounters as the primary data source for rate-setting substantially changed the methods used. Below we first describe fee-for-service claims data used in rate setting and then encounter data.

Claims Data

During the first three rate-setting cycles, capitation rates for the pre-OHP Medicaid populations were based primarily on each group's fee-for-service Medicaid experience. TANF data also were used for the New Families group, which was expected to have utilization patterns similar to this traditional categorical population. The other expansion group, New Adults/Couples, was initially assumed to resemble a commercially-insured population. During the first two rate setting cycles, their rates were based mainly on BCBSO data. The commercial BCBSO data were adjusted to reflect differing demographic characteristics of the New Adults/Couples population[11] and the higher utilization of certain services in a newly-insured population. Experience showed the comparison to a commercially-insured population to be a poor one. New Adults/Couples beneficiaries often became eligible during a spell of illness and were far more costly than originally anticipated. In this respect, the GA population was determined to be a better benchmark. In the third rate-setting cycle, rates for this population were based on GA fee-for-service data.

Pre-OHP fee-for-service Medicaid data, which were the most current data available, were used for the first two rate setting cycles. Even in the early years of OHP, there were limits on the accuracy of this data for the TANF population. Prior to OHP, Oregon operated

[11] These differences included an over-representation of men, under-representation of pregnant women and children, but an overall younger age profile.

a mandatory managed care program for TANF beneficiaries in nearly half of the State's counties (including Portland, the most heavily-populated area). Under this program, managed care plans did not submit encounter data for capitated services to the State. However, most plans were not capitated for a full range of services, so that excluded services were reflected in claims data. Thus, available claims data included most inpatient hospital care and prescription drugs because they generally were not capitated. Physician services, on the other hand, were not reported in the pre-OHP claims data for a large portion of the TANF population. Because claims for physician services were available only for those areas not included in the pre-OHP managed care program, the pre-OHP claims experience will not accurately reflect Statewide average utilization rates if utilization patterns varied across the State.

The problem of estimating payment rates in a managed care program in the absence of encounter data became more acute as OHP matured and pre-OHP claims data grew further out-of-date. Although some claims are submitted under OHP, fee-for-service data became increasingly non-representative given widespread enrollment in fully capitated plans.[12] Fee-for-service claims are only submitted for services delivered to beneficiaries not enrolled in managed care. Thus, claims are reported either for services received early in an eligibility spell before enrollment in an FCHP becomes effective, or for services provided to beneficiaries who do not enroll in managed care at all. In both cases, fee-for-service utilization is likely to be higher than average. Utilization may be disproportionately high immediately after eligibility begins either because of pent-up demand or because

[12] As of December 1997, approximately 89 percent of Phase 1 beneficiaries were enrolled in a fully-capitated managed care plan. The enrollment rate was somewhat lower among the Phase 2 population, only 80 percent.

beneficiaries enroll during a spell of illness. Sicker beneficiaries may not be enrolled in a managed care plan al all.[13] Indeed, the agency that administers OHP, the Office of Medical Assistance Programs (OMAP), contends that the most severe adverse selection in OHP occurs in the fee-for-service portion of the program.[14]

Although pre-OHP claims data were growing further out-of-date, OHP's actuary determined that, for the most part, post-OHP fee-for-service data could not be used for the third round of rate setting. Instead, the actuary again used Medicaid claims data from the two years preceding OHP implementation for all categories except GA and New Adults/Couples. For these groups, the actuary used Medicaid claims data from the first two years of OHP despite the recognized problems with post-OHP fee-for-service data. Rates for both of these groups were based on GA utilization data. The GA population was not eligible for full benefits prior to OHP so that cost estimates derived from pre-OHP data were felt to be inaccurate.[15] OHP fee-for-service data were also used to adjust rate calculations for some populations based on relative utilization rates between eligibility groups. For example, utilization rates for New Adults/Couples were determined to be only one-fifth as high as GA rates. OHP claims data also showed fee-for-service utilization rates for New Families that were about 11 percent lower than TANF beneficiaries. Based on this

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[13] Among other reasons, a beneficiary may be exempted from mandatory enrollment in a managed care plan in order to maintain an ongoing provider relationship and preserve continuity of care.

[14] In 1996, we surveyed traditional adult Medicaid eligibles covered under the TANF program and adults in the expansion population, both New Families and New Adults/Couples. The survey included questions to construct SF-12 health status scores. In contrast to OMAP's belief, the survey results for adults in the TANF and OHP expansion populations showed no difference in self-reported health status (based on their SF-12 scores) between beneficiaries enrolled in managed care and those in fee-for-service.

[15] Most importantly, GA beneficiaries were not covered for inpatient services prior to OHP.

information estimated costs for New Families, which had been based on TANF utilization, were reduced.

Encounter Data

By the fourth rate-setting cycle, OHP's actuary felt that they could no longer develop accurate cost estimates by trending forward increasingly out-of-date pre-OHP fee-for-service data. As a result, despite concerns about their completeness and quality, OHP announced its intention to use encounter data for rate setting beginning with the rate cycle covering October 1999 through September 2001. Encounter data covering a two-year period from July 1995 to June 1997 were used to calculate rates.

Plans were given a deadline of January 31, 1998 to submit complete encounter data for this time period. OMAP reported a heavy volume of encounter submissions from the plans in response to the newly provided incentive that their capitation payments would be dependent on utilization rates reflected in the encounter data. Plans were given an opportunity to review their encounter data, after they had been summarized by eligibility group and service category, against internal plan data. Based on this review, 9 of 14 FCHPs indicated that they did not wish to have their encounter data used in the rate-setting process. However, the 5 plans whose encounter data were used for rate setting represent 65 percent of FCHP enrollees.[16] Plans are not required to report encounters for prescription drugs. Data for estimating prescription drug utilization were obtained through a special request to the

[16] PricewaterhouseCoopers, "Oregon Health Plan Medicaid Demonstration, Analysis of Federal Fiscal Years 2000-2001 Average Costs," December 7, 1998.

plans. Capitation rates were eventually based on prescription drug utilization data provided by 4 plans, representing 64 percent of FCHP enrollees.[17]

Setting Capitation Rates

Claims-based Rate Setting

Using the claims data described above, the actuary calculated the cost of providing the full OHP benefit package by eligibility group. Adjustments were made for changes in eligibility rules and, for expansion groups, demographic differences from the populations used to estimate utilization rates. One of the objectives of OHP was to eliminate cost-shifting from the Medicaid program to private payors by ensuring that rates were set high enough to cover the cost of services provided. Service costs were estimated from claims charges using a combination of: (1) hospital cost-to-charge ratios; (2) information on discounts negotiated by managed care plans; and (3) the Resource Based Relative Value Scale (RBRVS) ranking of relative resource intensity for professional services. Costs were then trended forward to the contract period to account for changes in input prices.

Fee-for-service costs were further adjusted to reflect anticipated managed care savings. During the first biannual rate setting cycle, fairly modest savings were assumed based on experience under Oregon's pre-OHP 1915(b) waiver program and Medicare risk contracting. Initially, a 20 percent reduction in inpatient costs was allowed for most eligibility groups. Rates also reflected 15 percent savings on prescription drugs for the aged, blind and disabled populations with Medicare and 5 percent savings for those without

[17] PricewaterhouseCoopers, "Oregon Health Plan Medicaid Demonstration, Analysis of Federal Fiscal Years 2000-2001 Average Costs," December 7, 1998.

Medicare. Substantially greater savings from managed care efficiencies were built into rates beginning in October 1995. Managed care savings assumptions were again based on Oregon 1915(b) experience. In addition, the actuary incorporated findings from a Congressional Budget Office report summarizing analyses of managed care savings. Inpatient savings were increased to 30 percent for most eligibility groups. An additional 10 percent savings for maternity care was also built in. However, adjustments were made for an offsetting 10 percent increase in physician services for most populations, as well as an increase in prescription drug use for all except the aged, blind, and disabled.

Managed care plans are not responsible for the hospitalization costs of beneficiaries who become eligible during an inpatient stay. This is particularly significant for the GA and New Adults/Couples categories, because OMAP believes that a high proportion of these beneficiaries generally become eligible during a spell of illness. Capitation rates for these groups were reduced to account for fee-for-service use prior to enrollment in managed care. These reductions were particularly steep for the GA population. In the second rate-setting cycle it was assumed that less than half of the total costs for GA beneficiaries would occur during enrollment in managed care; in the third rate-setting cycle only a 25 percent reduction was assumed. Roughly two-thirds of the service costs for New Adults/Couples were assumed to fall during the capitated period in the second rate-setting cycle. This assumption was increased to 85 percent in the third cycle.

In the initial stages of the rate-setting process, the actuary estimates the cost of providing the complete OHP benefit package. In order to calculate the cost of the actual set of benefits covered, costs are allocated by line item on the priority list. The percent of total

costs associated with each line item is calculated. Based on the funding line for a given time period, the capitation rate is set at a percentage of total costs.

Capitation rates include an allowance for administrative costs. Until October 1997, administrative costs were set at 6 percent of the capitation payment. This rate was assumed to cover administrative costs for a mature managed care plan and was not intended to compensate for start-up costs. However, it appears that even established commercial plans in OHP incurred administrative costs that exceeded this amount. During the first three years of operation, the eight commercial plans that participated in OHP reported administrative expenses that were nearly 10 percent of total revenues on their OHP line of business (see Appendix A of Mitchell *et al.*, 1998). The average across all participating plans was approximately 9 percent. In response to complaints from plans, the administrative cost allowance was increased to 8 percent beginning October 1997.

Encounter-based Rate Setting

The process for setting capitation rates became more straightforward once encounter data were adopted as the basis for calculations. For example, data were now available on the utilization experience of expansion populations so their capitation rates no longer had to be based on adjusted rates for other eligibility groups. In addition, because encounter data reflect utilization during enrollment in an FCHP, it was no longer necessary to estimate managed care savings relative to fee-for-service, or to reduce rates for estimated utilization prior to enrollment in managed care.

Service costs were estimated from charges reported on encounters[18] based on methods similar to those in the past. These costs were then trended forward to the contract period. The method for estimating capitation rates depending on which line of the priority list was funded was also unchanged.[19] Capitation rates continued to include an 8 percent administrative cost allowance.

Alternatives to Rate Setting

Oregon has a history of using actuarial rate setting in Medicaid managed care dating back to the 1915(b) program that preceded OHP.[20] However, other States have used alternative approaches for setting capitation rates, including rate negotiation and competitive bidding. Since the inception of OHP, Oregon legislators have repeatedly introduced bills requiring OMAP to contract with plans through a competitive bidding process, contending that this would save money over administered prices.

To date, OMAP has resisted competitive bidding proposals. OMAP views such market-driven approaches as incompatible with the public-private partnership that they consider to be a foundation of OHP. This is seen as anathema to the spirit of cooperation with the plans that they have sought. Furthermore, while poor quality encounter data have

[18] FCHPs report billed charges on all encounters. While this is a required field in the encounter data, its accuracy may be problematic particularly for plans where providers are capitated or salaried. Indeed, as noted previously, only 5 of 14 plans agreed to have their encounter data used in the rate-setting process. However, these plans accounted for 65 percent of FCHP enrollment. As an alternative to using charges reported by plans, a state could use a fee schedule to assign charges to encounters based on procedure codes.

[19] Because rates were now based on prior experience under OHP, it was not possible to estimate the cost of services that were below-the-line during the base period, 1995 to 1997. However, the actuary assumed it was unlikely that the legislature would expand coverage to services that were previously below-the-line.

[20] Coopers and Lybrand (the predecessor of PricewaterhouseCoopers) had also set rates under Oregon's earlier 1915(b) program and, thus, had long experience with Medicaid managed care in Oregon.

made rate setting difficult, accurate utilization data are also needed to evaluate alternative bids. OHP plans have also not embraced competitive bidding proposals. In response to past budget shortfalls, plans have preferred rate reductions over proposals to institute competitive bidding. Nonetheless, as persistent budget problems have made rate setting a more rancorous process, the OMAP administration has expressed greater openness to competitive bidding.[21]

These issues aside, it is not clear whether competitive bidding would save money. OMAP has estimated that competitive bidding would realize a 2 percent savings.[22] Particularly in rural areas, it is not evident that there is a basis for competition. In these areas there is often a single hospital and a limited number of providers who are all associated with a single IPA that contracts with managed care plans. Public officials may be reluctant to exercise the threat to cancel plan contracts and dislocate patient-provider relationships, particularly in a visible program that serves vulnerable populations. Finally, in a public program, it may be difficult to accommodate the possibility that competitively bid rates will exceed the program's fixed budget.

Capitation Rate Trends

In general, new capitation rates have gone into effect at the beginning of each fiscal year. However, mid-year rate changes have been adopted at several points to accommodate movements in the cut-off line for coverage of services on the priority list, as well as changes in the scope of services that are the responsibility of managed care plans. While actuarial

[21] Oregon Health Forum, November 1997.

[22] Ibid.

cost estimates are the basis for rate setting, OMAP notes that rate adjustments over the course of the program have also responded to budgetary pressures and perceptions of payment levels that are acceptable to contracting plans.

Table 1 shows statewide average FCHP capitation rates in effect at the inception of OHP and at the start of each fiscal year through October 1999.[23] These rates include mandatory services under OHP contracts, as well as the administrative cost allowance.[24] Rate changes, in part, reflect differences in covered services between years, due to both line movements and other changes in OHP's scope of services. As described previously, the OHP basic category was broken into five groups beginning in 1997; blind and disabled beneficiaries with Medicare Part B only were also separated from other blind and disabled dual eligibles. In 1998, the categories for children were changed. Previously, there were separate categories for children above and below poverty. The above poverty category had a younger age distribution because it only included children under age 6, whereas the below poverty category included any child born after October 1, 1983. Following the changes in 1998, the children's categories were defined based on age, not poverty status, and the number of categories increased to four. The three categories for children below the age of six correspond fairly well to the former category for children above poverty. However, the old category for children below poverty included all age ranges and, therefore, does not correspond perfectly to the new category for children age 6-18.

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[23] Rate shown for October 1999 is the average biennial rate for the fiscal years beginning October 1999 and October 2000.

[24] The definition of mandatory services has varied over the course of the program. Family planning originally was optional but became mandatory in October 1995. Non-ambulance transportation and vision exams, therapy, and materials became mandatory in October 1995. The treatment of these services is described in the footnotes to Tables 1 and 2.

Table 1

Statewide Average FCHP Monthly Capitation Rate by Eligibility Group, 1994-1999

Eligibility Group	2/94 Line=565	10/94 Line=565	10/95 Line=606	10/96 Line=581	10/97 Line=574	10/98 Line=574	10/99* Line=574
Phase 1							
TANF					$132.25	$138.00	$123.05
Pregnant Women < 100% FPL					552.70	572.01	641.47
Children ≥ 6	$109.48	$115.23	$105.41	$105.58	102.32	32.54	51.53
New Families					102.58	119.53	142.73
New Adults/Couples					108.71	114.98	247.30
Pregnant Women > 100% FPL	598.32	627.50	543.00	592.08	666.13	689.01	649.93
PLM Children < 1						463.75	250.84
SCHIP Children < 1	167.00	174.66	118.53	130.68	144.77	163.41	138.18
PLM and SCHIP Children 1-5						53.43	55.85
General Assistance	294.40	307.64	240.77	260.81	452.29	469.62	579.99
Phase 2							
Blind and Disabled with Medicare	N/A	N/A	178.49	183.71	186.73	202.44	246.03
Blind and Disabled without Medicare	N/A	N/A	452.32	487.67	454.71	477.48	371.67
Aged with Medicare	N/A	N/A	148.67	158.57	161.57	176.28	281.14
Aged without Medicare	N/A	N/A	422.43	452.80	428.37	458.70	271.30
Children in Foster Care	N/A	N/A	112.08	117.78	127.07	132.49	102.72

* Average biennial rate for fiscal years beginning October 1999 and October 2000.

NOTE: Capitation rate includes FCHP mandatory services, as well as administrative costs. Services that were optional in 1994, but were mandatory in later time periods, are included in the rates for 1994. Family planning services were included in both February and October 1994. The rates for February 1994 also include other transportation and vision exams, therapy, and materials. Beginning in March 1997, the Aged with Medicare category excludes beneficiaries with Part B only. The October 1997 rate for this group was $190.28. OHP's rate categories for children changed substantially in July 1998. Prior to this date, separate categories were used for PLM children in families under 100% FPL born after October 1, 1983, and for PLM children in families 100-133% FPL under age 6. Beginning July 1998, OHP adopted rate categories based on age, rather than poverty status. In this table, 1994-1997 rates for PLM children under poverty are compared to 1998-1999 rates for children age 6 and over; 1994-1997 rates for PLM children over poverty are compared to 1998-1999 rates for children under age 6.

SOURCE: Office of Medical Assistance Programs.

While capitation rates for some categories have been fairly stable of the course of the program, others have shown a good deal of volatility. There are three primary explanations for dramatic movements in capitation rates. First, changes in the definition of rate categories led to marked fluctuations in capitation rates for some groups. For example, uncoupling the five eligibility groups that comprised the OHP basic category resulted in a substantial increase for PLM pregnant women below poverty. The adoption of children's eligibility categories based on age, rather than poverty status, produced a large increase in payments for PLM children under the age of one and large reductions for children over age one. Second, there was a good deal of uncertainty about the appropriate utilization assumptions for some populations where pre-OHP experience was limited or non-existent. Calculating rates for the GA population based on pre-OHP data was difficult because they were not covered for inpatient services prior to OHP. The expansion eligibility groups were even more challenging because there was no prior experience with these populations. Identifying a comparison population on which to base rates for New Adults/Couples was particularly problematic. Third, moving to rate calculations based on OHP encounter data rather than pre-OHP claims data led to large rate changes for many eligibility categories. The magnitude of these changes highlights the difficulty of making accurate actuarial adjustments with pre-managed care claims data that grow increasingly out-of-date. In addition, encounter data provided the first opportunity to base capitation rates on actual utilization experience for the expansion and GA populations.

Table 2 shows percent changes in capitation rates, by eligibility category, during the first six years of OHP. Between February and October 1994, rates increased approximately 5 percent to reflect inflation. The rate reductions in October 1995 reflect the assumption of

Table 2

Percent Change in Statewide Average FCHP Monthly Capitation Rate by Eligibility Group, 1994-1999

Eligibility Group	2/94 to 10/94	10/94 to 10/95	10/95 to 10/96	10/96 to 10/97	10/97 to 10/98	10/98 to 10/99*
Phase 1						
TANF				25.3%	4.3%	-10.8%
Pregnant Women <100% FPL				423.5	3.5	12.1
Children ≥ 6	5.3%	-8.5%	0.2%	-3.1	-68.2	58.4
New Families				-2.8	16.5	19.4
New Adults/Couples				3.0	5.8	115.1
Pregnant Women > 100% FPL	4.9	-13.5	9.0	12.5	3.4	-5.7
PLM Children < 1					220.3	-45.9
SCHIP Children < 1	4.6	-32.1	10.3	10.8	12.9	-15.4
PLM and SCHIP Children 1-5					-63.1	4.5
General Assistance	4.5	-21.7	8.3	73.4	3.8	23.5
Phase 2						
Blind and Disabled with Medicare	N/A	N/A	2.9	1.6	8.4	21.5
Blind and Disabled without Medicare	N/A	N/A	7.8	-6.8	5.0	-22.2
Aged with Medicare	N/A	N/A	6.7	1.9	9.1	59.5
Aged without Medicare	N/A	N/A	7.2	-5.4	7.1	-40.9
Children in Foster Care	N/A	N/A	5.1	7.9	4.3	-22.5

* Change calculated based on rate in effect in October 1998 and average biennial rate for fiscal years beginning October 1999 and October 2000.

NOTE: Capitation rate includes FCHP mandatory services, as well as administrative costs. Services that were optional in 1994, but were mandatory in later time periods, are included in the rates for 1994. Family planning services were included in both February and October 1994. The rates for February 1994 also include other transportation and vision exams, therapy, and materials. Beginning in March 1997, the Aged with Medicare category excludes beneficiaries with Part B only. OHP's rate categories for children changed substantially in July 1998. Prior to this date, separate categories were used for PLM children in families under 100% FPL born after October 1, 1983, and for PLM children in families 100-133% FPL under age 6. Beginning July 1998, OHP adopted rate categories based on age, rather than poverty status. In this table, 1994-1997 rates for PLM children under poverty are compared to 1998-1999 rates for children age 6 and over; 1994-1997 rates for PLM children over poverty are compared to 1998-1999 rates for children under age 6.

SOURCE: HER analysis of data provided by the Office of Medical Assistance Programs.

greater managed care savings in the second rate-setting cycle. According to OMAP, the adjustment for managed care efficiencies was made in order to deflect competitive bidding proposals advanced in response to budget overruns. Because the new assumptions incorporate a large reduction in inpatient utilization, the most dramatic impact on rates is seen in categories where inpatient services are a large share of total utilization. Rates remained relatively flat between 1995 and 1996, following a reduction in benefits through upward movement of the priority line and the assumption of lower medical inflation. The relative weights of the five eligibility groups in the OHP basic category also changed, leaving this rate virtually unchanged during this time period. The net effect of these changes was to leave rates for Phase 1 eligibles somewhat lower in October 1996 than they were at the start of the program.

In October 1997, however, rates rose sharply due to concerns over the financial condition of plans. Analysis of financial data reported by the plans to OHP shows an overall loss of more than $14 million dollars during the program's first three years in operation and a deterioration of financial performance between 1995 and 1996 (see Appendix A of Mitchell *et al.*, 1998). In response, OMAP estimated that rates increased an average of 10 percent across all eligibility groups. GA rates, in particular, rose dramatically, by more than 70 percent. Disaggregation of the OHP basic category also produced some marked changes, highlighting the lack of homogeneity in this rate category. Rates for PLM pregnant women under poverty more than quadrupled, while those for PLM children and New Families fell slightly. The weighted average of the five separate capitation rates, with weights based on FCHP enrollment in October 1997, was $120.70, or a 14.3 percent increase over the OHP basic rate in October 1996. A comparison of survey findings for adult beneficiaries in the

TANF, New Family, and New Adults/Couples categories showed significant differences between these eligibility groups in self-reported health status (Table 3). While all three groups have physical health scores that fall below the 50th percentile for the population as a whole (53.6),[25] the TANF and New Adults/Couples scores fall below the 25th percentile (46.5).[26] This provides further evidence that the OHP basic category encompassed a diverse group of beneficiaries. Thus, the decision to set separate payment rates for the groups within this category appears to have been well-founded.

Table 3

Average SF-12 Health Status Scores by Eligibility Group

	Physical Health*	Mental Health*
TANF	45.6	44.3
New Adults/Couples	43.1	45.6
New Families	48.8	49.3

* Eligibility groups are significantly different at p=.0001.

NOTE: A higher score indicates better health status.

SOURCE: HER-RTI survey of OHP Phase 1 eligibles, 1996.

Changes in children's eligibility categories led to substantial changes in capitation rates in October 1998. With the exception of infants, children have fairly low expected health care costs. Thus, capitation rates for the new age-based children's eligibility categories decline with age, ranging from $463.75 per month for PLM children under the age of one, to $32.54 for PLM and SCHIP children age six and over. A lower capitation rate was

[25] SF-12 norms for the general population appear in Ware, Kosinski, and Keller (1995).

[26] These findings continued to hold in a later survey of Phase 1 eligibles conducted in 1998.

set for SCHIP children under the age of one than for PLM children because OHP does not cover the cost of the initial hospitalization at birth for the SCHIP population.

It is difficult to compare age-based capitation rates for children with rates that were based on poverty status. The category of PLM children over 100 percent of FPL, which included only children under age 6, corresponds well to the three new categories for children under age 6.[27] However, the category of PLM children under 100 percent of FPL covered any child born after October 1, 1983 who met the income criteria, including those over and under age 6. Thus, the new category of children over age 6 corresponds to only a portion of the former category of PLM children below poverty. The 68 percent decrease in the capitation rate for this group reflects the older age distribution of the new rate group. Taken as a whole, the weighted average capitation payment for all children's eligibility groups fell from $140.52 to $102.98, or by 26.7 percent. The weighted average rate for all children's eligibility groups in 1998 was virtually unchanged from the 1997 rate of $102.32 for children under 100 percent of FPL (which included children in all age groups). In part these results are driven by the relatively older age profile of children covered by OHP in 1998 because the SCHIP eligibility expansions disproportionately affected older children. In contrast, the weighted average rate for children under age 6 increased by 19.9 percent compared to the 1997 rate for children over 100 percent of FPL, who were also all under age 6.

The new children's categories also had implications for the capitation rates for the expansion populations because they no longer included children. The shift of children out of the expansion categories was expected to increase the average cost of the remaining

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[27] The new children's eligibility categories include all children under 170 percent of FPL. Thus, the income levels in the new age-based rate categories are different from those in the old categories based on poverty status. However, we assume that the difference in the income distribution has a relatively minor impact on expected costs.

population because adult expansion beneficiaries were estimated to be higher cost than children. The impact of this change was greater for New Families than for New Adults/Couples, which prior to SCHIP only included a small number of beneficiaries under age 19. The consulting actuary that sets capitation rates for OHP estimated that the movement of children out of the expansion categories would increase the capitation rate for physical health services by 11.5 percent for New Families and 1.4 percent for New Adults/Couples.[28]

The change to encounter-based calculations in the October 1999 rate cycle again brought major changes in capitation rates, particularly for those eligibility groups where adequate pre-OHP claims data were not available. The largest change was for the New Adults/Couples category, where the capitation rate more than doubled. The rate for New Families increased by 19 percent, while that for GA eligibles increased by 24 percent. This suggests that attempts to calculate capitation rates based on extrapolation from the utilization experience of other eligibility groups or partial utilization data were not entirely successful. At the same time, the capitation rates for a number of traditional eligibility groups, for whom there was adequate pre-OHP claims data, also changed by large percentages. These changes support the concerns raised by OHP's actuary about continuing to trend forward pre-OHP claims data that were now more than five years old.

There were also dramatic changes in the rates for aged beneficiaries in the October 1999 rate cycle. Capitation rates for aged beneficiaries with Medicare increased by 60 percent, while those for beneficiaries without Medicare decreased by 41 percent. The net

[28] Memo from Sandi Hunt and Leslie Peters of PricewaterhouseCoopers to Lynn Read and Maureen King of OMAP regarding October 1998 Capitation Rates, August 14, 1998.

result of these changes is that the capitation rates for aged beneficiaries with Medicare were slightly higher than the rates for those without Medicare (Table 1). While this is contrary to the expected relationship between rates for these categories,[29] OMAP believes that there may be adverse selection into managed care vs. fee-for-service for aged beneficiaries with Medicare as compared to those without. In addition, OMAP notes that the aged without Medicare population is small and cost estimates may, therefore, be unstable. In the following rate setting cycle, the relationship between rates for aged beneficiaries with and without Medicare was in the expected direction. Finally, encounter data reporting may have been less complete for some eligibility categories than others. Although OMAP has not investigated this, if anything one would expect reporting to be less complete for beneficiaries with Medicare, not those without.

As described previously, OMAP varies rates by geographic area of the State (Figure 1). Table 4 shows geographic rate differences in the first three rate-setting cycles for the largest Phase 1 and Phase 2 eligibility groups—TANF and the blind and disabled without Medicare.[30] These eligibility groups show similar geographic rate differentials. Over time, the difference between areas has diminished. In February 1994, there was nearly a 10 percent difference between the TANF rates in the highest cost area (Tri-County) and the lowest cost rural area (Other). By 1997, this difference had narrowed to approximately 6 percent. The geographic differentials adjust only for input price differences, not variation in service delivery patterns. If rural areas have less costly practice patterns because access to specialists

[29] The relationship between rates for blind and disabled beneficiaries with and without Medicare is in the expected direction.

[30] Similar comparisons of rates by geographic area cannot be made in later time periods because of the adoption of plan-specific geographic adjustments.

Table 4

FCHP Monthly Capitation Rate as a Percent of Statewide Average, 1994-1997

	2/94	10/95	10/97
TANF			
Statewide Rate	$109.48	$105.41	$132.25
Tri-County	105%	106%	103%
Linn/Benton/Marion/Polk/Yamhill	97	97	98
Lane	98	100	101
Jackson/Josephine/Douglas	98	99	98
Other	96	94	97
AB/AD without Medicare			
Statewide Rate	N/A	$452.32	$454.71
Tri-County	N/A	105%	103%
Linn/Benton/Marion/Polk/Yamhill	N/A	97	98
Lane	N/A	100	102
Jackson/Josephine/Douglas	N/A	99	98
Other	N/A	95	97

NOTE: Capitation rate includes FCHP mandatory services, as well as administrative costs. Services that were optional in 1994, but were mandatory in later time periods, are included in the rates for 1994. Family planning services were included in both February and October 1994. The rates for February 1994 also include other transportation and vision exams, therapy, and materials.

SOURCE: HER analysis of data provided by the Office of Medical Assistance Programs.

and high technology procedures is limited, this policy would overpay plans in rural areas relative to urban. Indeed, analysis of plan financial performance shows that predominantly rural plans have fared well under OHP, while the larger, predominantly urban plans are experiencing financial difficulties (see Appendix A of Mitchell *et al.*, 1998).

Risk Adjustment

Risk selection is a persistent concern in capitated managed care programs. Varying capitation rates by eligibility group and increasing the number of rate categories mitigates potential selection problems. Nonetheless, differential selection within rate categories may still occur. Plans that enroll a sicker than average population within a rate category are at a financial disadvantage if payment rates are not adjusted to reflect these differences. In addition, failure to risk adjust creates incentives for plans to enroll the healthiest beneficiaries. Opportunities for risk selection are somewhat limited in programs like OHP, where managed care plans cannot market directly to beneficiaries and the benefit package is fixed by the State. However, selection may occur "naturally" by virtue of the providers associated with a plan. Plans may also selectively encourage high cost beneficiaries to disenroll.

While plans have raised largely anecdotal claims of risk selection, OMAP has identified some evidence that high cost cases are not equally distributed across plans. For example, according to OMAP, beneficiaries with HIV/AIDS are disproportionately enrolled in CareOregon, a plan associated with federally-qualified health centers and other traditional indigent care providers. OMAP has also found that maternity and transplant cases are concentrated in certain plans. CareOregon contends that its greater concentration of non-

English speaking members also constitutes adverse selection because the greater demand for translation service increases service delivery costs; however, OMAP considers this a cost factor, but not a risk factor *per se*.

During the first four years of OHP, OMAP did not directly adjust capitation payments for risk differences across plans. However, two policies did address concerns about adverse selection. First, the State offered stop-loss insurance to participating plans. In addition, a maternity and newborn withhold was established to adjust for differences across plans in the percentage of enrollees requiring maternity services. Twenty-five percent of the capitation payment amounts attributed to maternity and newborn services were placed in the withhold pool. The withhold was then distributed to plans based on a calculation of their relative shares of newborns enrolled at birth using eligibility and enrollment data. This approach was widely criticized for not accurately measuring a plan's provision of maternity services because newborns are not always enrolled in the mother's plan. For example, if the infant dies or the family moves to a new service area, the plan in which the mother received maternity services would not receive credit.

Beginning in June 1998 OMAP no longer uses the maternity and newborn withhold. Instead, it has included a capitation rate adjustment factor for the prevalence of maternity and newborn services. The maternity adjustment is based on experience reflected in encounter data for an earlier time period. The newborn adjustment continues to be based on eligibility and enrollment data. OMAP established a floor on the new maternity and newborn adjustment such that no plan will have more than a 25 percent reduction in the portion of its capitation rate allocated to these services; however, there is no ceiling on the adjustment.

In response to concerns about adverse selection, OMAP adopted more general risk adjusters in its fifth year of operation. Risk adjustment was implemented for GA, New Adults/Couples, and blind and disabled beneficiaries without Medicare on June 1, 1998. The risk adjustments are based on the Disability Payment System (DPS) developed by the Medicaid Working Group (Kronick *et al.,* 1996). These groups were targeted for risk adjustment because they were believed to have the greatest likelihood for risk selection. In addition, they were considered to be the eligibility groups most comparable to the population on which the DPS was based. The DPS was developed using data for disabled Medicaid beneficiaries in five States. While it was considered better suited to the Medicaid population than other risk adjustment methods, its applicability to many of the groups in OHP is limited. The Medicaid Working Group is extending the DPS to cover the non-disabled Medicaid population. OMAP has indicated that it might eventually apply comprehensive risk adjustment to all eligibility categories. However, this has not happened to date.

The DPS assigns relative cost weights to beneficiaries based on the presence of selected diagnoses that are predictive of future utilization. Scores are normalized to a value of 1.00 across plans. The DPS was modified for Oregon to reflect the mix of services covered by FCHPs. In particular, FCHPs are not at risk for most mental health services.

As with OMAP's new rate setting methodology, implementation of the DPS is dependent on having accurate encounter data. Because of ongoing concerns about the completeness of encounter data and differential reporting rates across plans, OMAP adopted a 10 percent corridor for risk adjustment. As a result, risk adjustment will not cause any plan's capitation payment to differ from the average by more than 10 percent.

Table 5 shows the risk adjustment scores that were applied to capitation rates effective October 1, 1998. CareOregon and Cascade Comprehensive Care have scores at or close to the maximum of 1.10 for all three eligibility groups. Regence HMO Oregon also tends to enroll a sicker than average population. At the other end of the spectrum, the DPS shows that Central Oregon Independent Health Services and Kaiser are subject to favorable selection. The capitation rate for every plan was adjusted up or down by five percent or more for at least one of the three eligibility groups. An analysis of risk selection in the disabled population without Medicare, which used demographic characteristics, reason for disability, and receipt of long term care services as markers for expected utilization, was generally consistent with the results of DPS risk adjustment (Kulas *et al.,* 2000). In addition, like the DPS analysis, this study found that selection is not always consistent across rate categories and a plan may experience favorable selection in one category, but adverse in another.

OMAP has also considered selected condition-specific adjustments, for example HIV/AIDS. However, some plans objected to focusing on a limited set of individual conditions. They contended that such a list over-emphasizes the financial risk associated with some conditions, while ignoring other conditions that also may be more costly to treat. To date, condition-specific adjustments have not been implemented.

Lessons Learned

When OHP was introduced, providers were generally satisfied with the capitation rates because they were based on the cost of providing services and were more generous than

Table 5

Risk Adjustment Scores Applied to October 1998 Capitation Rates

Plan Name	Blind and Disabled Without Medicare	General Assistance	New Adults/ Couples
CareOregon	1.100	1.100	1.100
Cascade Comp. Care	1.100	1.094	1.100
COIHS	0.902	0.916	0.904
DCIPA	0.968	0.903	0.953
FamilyCare	0.976	0.903	0.904
InterCommunity	0.945	1.001	1.041
Kaiser	0.902	0.903	0.904
Mid-Rouge IPA	1.037	0.903	0.977
ODS	0.958	1.051	0.987
OHMS	0.928	0.948	0.953
Providence	0.930	0.904	0.933
Regence HMOO	1.054	1.047	1.064
Tuality Healthcare	0.902	1.100	1.043
All Plans	1.000	1.000	1.000

SOURCE: Memo from Sandi Hunt and Leslie Peters of PricewaterhouseCoopers to Lynn Read and Maureen King of OMAP regarding October 1998 Capitation Rates, August 14, 1998.

historical fee-for-service rates. It is difficult to directly compare rates for Medicaid beneficiaries with those from commercially-insured populations because utilization patterns differ substantially.[31] However, for those plans with both OHP and commercial business, the average profit margin on the OHP line of business was more than 5 percent lower than their overall corporate profit margin (see Appendix A of Mitchell *et al.,* 1998). From this, one can infer that OHP capitation rates are set relatively lower than commercial rates.

Over the first few years of OHP, OMAP was forced repeatedly to reduce capitation payments in response to budget shortfalls. As a result, provider discontent with payment levels has grown. Although the priority list was intended to be the primary budget mechanism in OHP, OMAP has also achieved savings through changes in the assumptions underlying the rate-setting process. Partly as a result of this, two and a half years into OHP, rates were largely unchanged from the program's inception. In response to evidence of severe financial problems among contracting plans, OMAP increased rates in the fourth year of the program. In light of HCFA's refusal to approve further priority line movement, it appears that OMAP may have reached the limit of its ability to manage the OHP budget using the priority list. OMAP has turned to supplemental tobacco tax revenues and new revenues from SCHIP to stave off budget crises. Nonetheless, it is possible that they will again have to look to rate reductions for savings and it is likely that capitation rates will be an ongoing area of tension.

The methods used to set capitation rates in OHP have evolved over the course of the program. In an effort to establish payments that accurately reflect the expected costs of

[31] A comparison of Medicaid and commercial populations enrolled in the same HMO found that Medicaid enrollees were 23 percent more expensive (Welch and Wade, 1995).

enrolled populations, OHP has substantially revised several key aspects of its rate setting process. First, they have refined the capitation rate categories, increasing the number from nine to sixteen. Second, they transitioned from using pre-managed care claims data to using encounter data as the primary source for calculating capitation payments. Third, they adopted risk adjustment for selected rate categories. As a result of these changes, there was a good deal of volatility in capitation rates during the first six years of the program and substantial realignment in the relative payment rates for a number of groups. Oregon's experience with rate setting offers several important lessons to other states that enroll a large portion of their Medicaid population in managed care.

A number of states, like Oregon, have used Medicaid eligibility expansions as a vehicle to reduce the size of the uninsured population and these expansion groups are often required to enroll in a managed care plan. Depending on the characteristics of the population covered through the expansion, it can be very challenging to set capitation rates for these newly eligible groups, for which there is no prior Medicaid experience. Higher income children and pregnant women covered through expansions can be assumed reasonably to have utilization patterns similar to current Medicaid populations. However, extrapolating from the experience of traditional Medicaid eligibility groups can be problematic for an expansion population, such as that in Oregon, which includes low-income adults generally. Indeed, Oregon found that the expansion population, particularly New Adults/Couples, was far more expensive than initially anticipated and utilization assumptions for this population have been revised repeatedly throughout the program. Other states covering similar populations through eligibility expansions will need to carefully consider the appropriate

base for setting capitation payments and will need to monitor plan experience with these groups.

Oregon is a pioneer in its use of encounter-based risk adjustment. Previously, Colorado's Medicaid program implemented risk adjustment using the DPS in 1997 (Dunn, 1998; Tollen and Rothman, 1998). While risk adjustment for Medicare+Choice plans has been widely studied, risk selection is often considered less of a concern in Medicaid managed care programs. Medicaid programs often place substantial restrictions on direct marketing to beneficiaries and on the design of the benefit package. There are also fewer incentives to risk select in many traditional Medicaid populations that are relatively low cost (e.g., children) or that have predictable costs that can easily be accounted for in capitation rates (e.g., pregnant women). Nonetheless, selection may still arise from provider network characteristics or from differential disenrollment patterns across plans. Furthermore, while early Medicaid managed care programs were often limited to TANF populations, they increasingly include higher cost populations, such as the disabled, where the potential gains from favorable selection are much greater. Indeed, several OHP plans had risk adjustment scores that were at or close to the maximum of 10 percent allowed in the first year of risk adjustment. In Colorado's Medicaid program, one plan received an increase of almost 26 percent in the payment for its disabled enrollees as a result of risk adjustment (Dunn, 1998). Thus, risk adjustment is an important concern, even in Medicaid where the opportunities appear relatively limited. However, in order to implement risk adjustment, states will need to collect data on the characteristics of enrolled populations, whether through special data collection efforts or as part of ongoing collection of encounter data.

As they mature, managed care programs face a challenge to collect utilization data that can be used to set payment rates. Claims data from the pre-managed care period become more and more dated, making it increasingly difficult to use them for current period estimates. With growth in managed care enrollment, remaining fee-for-service claims data dwindle and become increasingly non-representative. Furthermore, risk adjustment requires collection of data from within the managed care system. Many Medicaid managed care programs have been frustrated in their attempts to enforce encounter data reporting requirements. Although encounter data collection in OHP has been problematic, OMAP appears committed to using encounter data for rate setting and risk adjustment. The expectation that payment rates are dependent on encounters should provide significant incentives for plans to submit complete data. However, it is uncertain whether the plans' responses to these incentives will be adequate to ensure the accuracy of encounter data. Indeed, in Oregon, most of the contracting plans declined to have their data used in the rate-setting process. Nonetheless, with the ever-increasing commitment to enrolling Medicaid populations in managed care plans, states will have no alternative to enforcing some form of encounter data collection.

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